

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-19994-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: **06.10.2020**

Date of issue: 06.10.2020

Holder of certificate:

**IFAB Ingenieure für angewandte Brandschutzforschung GmbH
Pankstraße 8 Haus A, 13127 Berlin**

Tests in the fields:

**Proof of the effectiveness of water-based fire-fighting systems by fire tests for rolling stock, industrial plants, public places, store rooms, engine and machinery spaces, tunnel- and transport infrastructure systems as well as high-voltage batteries;
Experimental determination of design fire scenarios by full scale fire tests**

Within the given testing field marked with *, the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, to use standards or equivalent testing methods listed here with different issue dates.

Within the given testing field marked with **, the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, the modification, development and refinement of testing methods.

The testing laboratory maintains a current list of all testing procedures within the flexible scope of accreditation.

The management system requirements in DIN EN ISO/IEC 17025 are written in language relevant to operations of testing laboratories and operate generally in accordance with the principles of DIN EN ISO 9001.

*The certificate together with its annex reflects the status at the time of the date of issue. The current status of the scope of accreditation can be found in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH.
<https://www.dakks.de/en/content/accredited-bodies-dakks>*

Abbreviations used: see last page

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This document is a translation. The definitive version is the original German annex to the accreditation certificate.

Annex to the accreditation certificate D-PL-19994-01-00

Fire tests *

DIN CEN/TS 14972 09-2011	Fixed fire-fighting systems - Watermist systems - Design and installation (Annex A.1, A.2, A.3 and F)
IMO Resolutions MSC 265 (84) 05-2008	Amendments to the revised guidelines for approval of sprinkler systems equivalent to that referred to in SOLAS regulation II-2/12 (Resolution A.800(19))
UNI 11565 09-2016	Railway Vehicles - Design, Installation, Validation and maintenance of fire detection and extinguishing systems to be utilized in rail vehicles - General Principles Annex B - Fire protection/Extinguishing system test
SOLIT Engineering Guidance 2012	Engineering Guidance for a Comprehensive Evaluation of Tunnels with Fixed Fire Fighting Systems Annex 7: Fire Tests and Fire Scenarios for Evaluation of FFFS
ARGE-Richtlinie BBA - Teil 2 2018	Fire-fighting in Rolling Stock - Functional assessment procedure for the effectiveness of fire-fighting systems in rooms accessible to persons, in electric cabinets and in areas of combustion engines
FM 5560 2016	Approval standard for water mist systems / Fire tests Appendices: A - N

Fire tests – in-house procedures **

IFAB 7-1-1/1 06-2018	Procedure to determine temperature development in the surrounding of fires as proof of fire control, -suppression or -extinguishment using thermocouples
IFAB 7-1-1/2 06-2018	Procedure to determine the amount of released fire-fighting agent by pressure measurement
IFAB 7-1-1/3 06-2018	Procedure to determine the concentration of oxygen, carbon monoxide and -dioxide in the surrounding of fire to proof the fulfillment of specific protection objectives using electrochemical or infrared measuring methods
IFAB 7-1-1/4 03-2020	Procedure to determine the concentration of combustion gases by using a FTIR multigas analytical equipment in the surrounding of fire to proof the fulfillment of specific protection objectives

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Abbreviations used:

ARGE	Cooperation of consortium for fire protection technologies
CEN	Comité Européen de Normalisation / European Committee for Standardization
DIN	German Institute for Standardization (Deutsche Institut für Normung e.V.)
FM	Associated Factory Mutual Fire Insurance Companies
IMO	International Maritime Organisation
IFAB	In-house procedures of IFAB GmbH
SOLIT	Safety of Life in Tunnels
TS	Technical Specification
UNI	Ente Nazionale Italiano di Unificazione